

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

(Claims 1-3 have been cancelled.)

4.(Currently Amended) A method of storing audio data on a CD, comprising:
storing in (the audio portion) of said CD a first two track audio signal, wherein said first two track audio signal is reproducible by playing said CD on a conventional audio CD player;
storing additional audio data on said CD outside of said audio portion according to a distinct logical structure requiring a differing read process than the audio portion of the CD;
and

storing control information on said CD, wherein said first two track audio signal and said additional audio data (can be) combined through use of said control information to reproduce a unified audio signal.

5.(Original) The method of claim 4, wherein said unified audio signal comprises a second two track audio signal of higher resolution than said first two track audio signal.

6.(Original) The method of claim 4, wherein said unified audio signal comprises more than two channels.

7.(Currently Amended) A method for storing an audio signal of two or more channels, comprising:

deriving from the audio signal data, comprising:

a plurality of digital signals, wherein a first of said plurality of digital signals is a first two track audio signal; and

control information, wherein a reproduction of said audio information (can be) produced from said plurality of digital signals by use of said control information;

storing said first digital signal on a first medium;
storing the remainder of said plurality of digital signals on one or more second media, wherein said first and second media are distinct physical media; and
storing the control information.

8.(Original) The method of claim 7, wherein said first medium is a rewritable memory.

9.(Original) The method of claim 8, further comprising:
compressing said first digital signal prior to storing on said first medium.

10.(Original) The method of claim 7, wherein said first medium is the audio portion of a compact disk (CD), wherein said first digital signal can be reproduced on a conventional CD player.

11.(Currently Amended) The method of claim ~~10~~ 115, wherein said one or more second media is the CD-ROM portion of said CD.

12.(Original) The method of claim 11, wherein said control information is stored in the CD-ROM portion of said CD.

13.(Currently Amended) The method of either of claims ~~claim~~ 7 or 107, wherein said audio signal audio comprises more than two channels.

14.(Currently Amended) The method of either of claims ~~claim~~ 7 or 107, wherein said reproduction of said audio signal comprises a second two track audio signal of higher resolution than a reproduction based on said first two track audio signal alone.

(Claims 15-70 have been cancelled.)

71.(Currently Amended) A method for storing an N-channel audio signal, wherein N is an integer greater than two, comprising:

deriving from said N-channel audio signal a two channel representation;

recording said two channel representation on a first medium;

forming additional information, comprising:

a residual dependent upon the difference between said N-channel audio signal and said two channel representation; and

control information, including data that can be used to recombine said residual with said two channel representation to reconstruct an M-channel representation of said N-channel audio signal, wherein M is greater than two but not greater than N;

recording said residual on one or more second media, wherein said first and second media are distinct physical media; and

recording said control information.

72.(Original) The method of claim 71, wherein said first media is the audio portion of a compact disk (CD), wherein said two channel representation can be reproduced on a conventional CD player.

73.(Currently Amended) The method of claim ~~72~~ 119, wherein said recording of said control information is on said one or more second media, and wherein said one or more second media is the CD-ROM portion of said CD.

74.(Currently Amended) The method of either of claims claim 71 or 117, wherein M equals N.

75.(Original) The method of claim 74, wherein said residual contains (N-2) independent channels.

76.(Original) The method of claim 74, wherein said residual contains less than (N-2) independent channels.

77.(Currently Amended) The method either of claims ~~claim~~ 71 or 117, further comprising:

compressing said residual prior to its recording.

78.(Original) The method of claim 77, wherein control information contains data on how said residual is compressed.

79.(Currently Amended) The method of either of claims ~~claim~~ 71 or 117, wherein the deriving from said N-channel audio signal a two channel representation is based upon a linear combination of a finite set of spatial harmonics.

80.(Currently Amended) A The method of ~~claim 79~~ for storing an N-channel audio signal, wherein N is an integer greater than two, comprising:

deriving from said N-channel audio signal a two channel representation based upon a linear combination of a finite set of spatial harmonics;

recording said two channel representation on a first medium;

forming additional information, comprising:

a residual dependent upon the difference between said N-channel audio signal and said two channel representation, wherein said residual comprises a combination of zero and first order spatial harmonics which is linearly independent of said two channel representation; and

control information, including data that (can be used) to recombine said residual with said two channel representation to reconstruct an M-channel representation of said N-channel audio signal, wherein M is greater than two but not greater than N;

recording said residual on one or more second media; and

recording said control information.

81.(Currently Amended) The method of claim 71, wherein the recording of said first medium is a rewritable memory.

82.(Original) The method of claim 81, further comprising:

compressing said two channel representation prior to its recording.

(Claims 83-88 have been cancelled.)

89.(Currently Amended) A method of storing N-channel audio data on a CD, wherein N is greater than two, comprising:

storing a two track reduction of said N-channel audio data, wherein said two track reduction is reproducible by playing said CD on a conventional audio CD player; and

storing control information on said CD; and

storing additional audio data on said CD outside of said audio portion according to a distinct logical structure requiring a differing read process than the audio portion of the CD, wherein said two track reduction and said additional audio information can be combined through use of said control information to reproduce an M-channel representation of said N-channel audio data, wherein M is greater than two but not greater than N.

90.(Original) The method of claim 89, wherein said additional audio information is compressed.

91.(Original) The method of claim 90, wherein control information contains data on how said additional audio information is compressed.

92.(Original) The method of claim 89, wherein M is equal to N.

93.(Original) The method of claim 92, wherein said additional audio information contains (N-2) independent channels.

94.(Original) The method of claim 92, wherein said additional audio information contains less than (N-2) independent channels.

(Claims 95-106 have been cancelled.)

107.(New) A method for storing an audio signal of two or more channels, comprising:

deriving from ~~(the audio signal data)~~ comprising:

a plurality of digital signals, wherein a first of said plurality of digital signals is a first two track audio signal; and

control information, wherein a reproduction of said audio information can be produced from said plurality of digital signals by use of said control information;

storing said first digital signal on a first medium;

storing the remainder of said plurality of digital signals on one or more second media, wherein the first and second media have distinct logical structures requiring differing read processes; and

storing the control information.

108.(New) The method of either of claims 4 or 89, where said additional audio data is stored in a CD-ROM portion of said CD.

109.(New) The method of claim 108, where said additional audio data is stored in a file format.

110.(New) The method of claim 109, where the file format employs the ISO9660 standard.

111.(New) The method of claim 7, wherein said first digital signal on the first medium in an MP3 format.

112.(New) The method of any of claims 7, 8, 111, or 107, wherein said one or more second media include a compact disk.

113.(New) The method of claim 10, wherein said one or more second media include a supplemental compact disk.

114.(New) The method of any of claims 7, 8, 10, 111, or 107, wherein said one or more second media include the hard drive of a personal computer.

115.(New) The method of claim 107, wherein said first medium is a rewritable memory.

116.(New) The method of claim 107, wherein said first medium is the audio portion of a compact disk (CD), wherein said first digital signal can be reproduced on a conventional CD player.

117.(New) A method for storing an N-channel audio signal, wherein N is an integer greater than two, comprising:

deriving from said N-channel audio signal a two channel representation;

recording said two channel representation on a first medium;

forming additional information, comprising:

a residual dependent upon the difference between said N-channel audio signal and said two channel representation; and

control information, including data that can be used to recombine said residual with said two channel representation to reconstruct an M-channel representation of said N-channel audio signal, wherein M is greater than two but not greater than N;

recording said residual on one or more second media, wherein the first and second media have distinct logical structures requiring differing read processes; and

recording said control information.

118.(New) The method of claim 117, wherein said first medium is a rewritable memory.

119.(New) The method of claim 117, wherein said first medium is the audio portion of a compact disk (CD), wherein said first digital signal can be reproduced on a conventional CD player.

120.(New) The method of claim 71, wherein said first digital signal on the first medium in an MP3 format.

121.(New) The method of any of claims 71, 81, 117, or 120, wherein said one or more second media include a compact disk.

122.(New) The method of claim 72, wherein said one or more second media include a supplemental compact disk.

123.(New) The method of any of claims 71, 72, 81, 117, or 120, wherein said one or more second media include the hard drive of a personal computer.